

Application No.: 09/854,557

Docket No.: 21994-00022-US1

AMENDMENTS TO THE CLAIMS

1. (Canceled)

2. (Currently amended) ~~The~~ An information recording medium ~~in accordance with claim 1,~~ comprising:

an information track formed spirally or in coaxial circles;

a recordable area for information being prerecorded with a frequency signal and an address signal from an inner circumference of said information track; and

a read only area being recorded with a reproduction signal as a readable pit, wherein there existed a boundary between said recordable area and said read only area, and

wherein continuity of a tracking error signal is regulated in an area adjacent to said boundary between said recordable area and said read only area.

3. (Currently amended) ~~The~~ An information recording medium ~~in accordance with claim 1,~~ comprising:

an information track formed spirally or in coaxial circles;

a recordable area for information being prerecorded with a frequency signal and an address signal from an inner circumference of said information track; and

a read only area being recorded with a reproduction signal as a readable pit, wherein there existed a boundary between said recordable area and said read only area, and

Application No.: 09/854,557

Docket No.: 21994-00022-US1

___ wherein a push-pull signal is regulated in an area adjacent to said boundary between said recordable area and said read only area.

Claims 4-9. (Canceled)

10. (Currently Amended) The information recording medium in accordance with claim ~~12~~, wherein said continuity of said tracking error signal is regulated as a ratio of amplitude in the boundary as amplitude in upward and downward directions from a center of amplitude of a tracking error signal in a regular area to amplitude of the tracking error signal in the regular area.

11. (Original) The information recording medium in accordance with claim 10, wherein said continuity of said tracking error signal is regulated as $P3 / (P1 + P2) > 0.2$ and $P4 / (P1 + P2) > 0.2$, and wherein the amplitude of the tracking error signal in the regular area is defined as $P1 + P2$, and the amplitude in the upward and the downward directions from the center of the amplitude of the tracking error signal in the regular area are defined as $P3$ and $P4$ respectively.

12. (Original) The information recording medium in accordance with claim 3, wherein said push-pull signal is regulated as a ratio of amplitude in the boundary as amplitude in upward and downward directions from a center of amplitude of a tracking error signal in a regular area to amplitude of the tracking error signal in the regular area.

Application No.: 09/854,557

Docket No.: 21994-00022-US1

13. (Original) The information recording medium in accordance with claim 12, wherein said push-pull signal is regulated as $P3 / (P1 + P2) > 0.2$ and $P4 / (P1 + P2) > 0.2$, and wherein the amplitude of the tracking error signal in the regular area is defined as $P1 + P2$, and the amplitude in the upward and the downward directions from the center of the amplitude of the tracking error signal in the regular area are defined as $P3$ and $P4$ respectively.

Claim 14-21. (Canceled)

22. (Original) A recording method of an information recording medium, which comprises an information track formed spirally or in coaxial circles, a recordable area for information being prerecorded with a frequency signal and an address signal from an inner circumference of said information track, and a read only area being recorded with a reproduction signal as a readable pit, wherein there existed a boundary between said recordable area and said read only area, said recording method comprising steps of:

identifying the information recording medium by reproducing an identification information out of information recorded on the information recording medium;

judging said boundary being identified in said step of identifying by using an address information; and

recording in a vicinity of said boundary for performing a recording process by altering a control method of tracking.

23. (Original) A recording method of an information recording medium, which comprises an information track formed spirally or in coaxial circles, a first read only area

Application No.: 09/854,557

Docket No.: 21994-00022-US1

recorded with a frequency signal being recorded as a pit being able to read out a reproduction signal, and a second read only area recorded as a pit being unable to read out a reproduction signal and prerecorded with a frequency signal and an address signal, wherein there existed a boundary between said first read only area and said second read only area, said recording method comprising steps of:

identifying the information recording medium by reproducing an identification information out of information recorded on the information recording medium;

judging said boundary being identified in said step of identifying by using an address information; and

recording in a vicinity of said boundary for performing a recording process by altering a control method of tracking.

24. (Original) A recording method of an information recording medium, which comprises an information track formed spirally or in coaxial circles, a recordable area for information being prerecorded with a frequency signal and an address signal from an inner circumference of said information track, a first read only area recorded with a frequency signal being recorded as a pit being able to read out a reproduction signal, and a second read only area recorded as a pit being unable to read out a reproduction signal and prerecorded with a frequency signal and an address signal, wherein there existed a boundary between said recordable area and said first read only area and another boundary between said first read only area and said second read only area, said recording method comprising steps of:

identifying the information recording medium by reproducing an identification information out of information recorded on the information recording medium;

judging said boundary being identified in said step of identifying by using an address information; and

Application No.: 09/854,557

Docket No.: 21994-00022-US1

recording in a vicinity of said boundary for performing a recording process by altering a control method of tracking.

25. (Original) A reproducing method of an information recording medium, which comprises an information track formed spirally or in coaxial circles, a recordable area for information being prerecorded with a frequency signal and an address signal from an inner circumference of said information track and a read only area being recorded with a reproduction signal as a readable pit, wherein there existed a boundary between said recordable area and said read only area, said reproducing method comprising steps of:

identifying the information recording medium by reproducing an identification information out of information recorded on the information recording medium;

judging said boundary being identified in said step of identifying by using an address information; and

reproducing said boundary for performing a reproducing process by altering a control method of reproducing.

26. (Original) A reproducing method of an information recording medium, which comprises an information track formed spirally or in coaxial circles, a first read only area recorded with a frequency signal being recorded as a pit being able to read out a reproduction signal, and a second read only area recorded as a pit being unable to read out a reproduction signal and prerecorded with a frequency signal and an address signal, wherein there existed a boundary between said first read only area and said second read only area, said reproducing method comprising steps of:

Application No.: 09/854,557

Docket No.: 21994-00022-US1

identifying the information recording medium by reproducing an identification information out of information recorded on the information recording medium;

judging said boundary being identified in said step of identifying by using an address information; and

reproducing said boundary for performing a reproducing process by altering a control method of reproducing.

27. (Original) A reproducing method of an information recording medium, which comprises an information track formed spirally or in coaxial circles, a recordable area for information being prerecorded with a frequency signal and an address signal from an inner circumference of said information track, a first read only area recorded with a frequency signal being recorded as a pit being able to read out a reproduction signal, and a second read only area recorded as a pit being unable to read out a reproduction signal and prerecorded with a frequency signal and an address signal, wherein there existed a boundary between said recordable area and said first read only area and another boundary between said first read only area and said second read only area, said reproducing method comprising steps of:

identifying the information recording medium by reproducing an identification information out of information recorded on the information recording medium;

judging said boundary being identified in said step of identifying by using an address information; and

reproducing said boundary for performing a reproducing process by altering a control method of reproducing.

Application No.: 09/854,557

Docket No.: 21994-00022-US1

28. (Original) The reproducing method of an information recording medium in accordance with claim 25, wherein said steps further comprises a step of skipping a reproduction signal recorded in a vicinity of said boundary.

29. (Original) The reproducing method of an information recording medium in accordance with claim 26, wherein said steps further comprises a step of skipping a reproduction signal recorded in a vicinity of said boundary.

30. (Original) The reproducing method of an information recording medium in accordance with claim 27, wherein said steps further comprises a step of skipping a reproduction signal recorded in a vicinity of said boundary.

31. (New) A reproducing apparatus of an information recording medium comprising:

an information track formed spirally or in coaxial circles;

a recordable area for information being prerecorded with a frequency signal and an address signal from an inner circumference of said information track; and

a read only area being recorded with a reproduction signal as a readable pit, wherein there existed a boundary between said recordable area and said read only area, and wherein continuity of a tracking error signal is regulated in an area adjacent to said boundary between said recordable area and said read only area,

said reproducing apparatus comprising:

a reproducer for reproducing an address signal of said information track; and

Application No.: 09/854,557

Docket No.: 21994-00022-US1

means for tracking said boundary continuously on the basis of amplitude of said tracking error signal in accordance with said address signal reproduced by said reproducer.

32. (New) A reproducing apparatus of an information recording medium comprising:

an information track formed spirally or in coaxial circles;

a recordable area for information being prerecorded with a frequency signal and an address signal from an inner circumference of said information track; and

a read only area being recorded with a reproduction signal as a readable pit, wherein there existed a boundary between said recordable area and said read only area, and wherein a push-pull signal is regulated in an area adjacent to said boundary between said recordable area and said read only area,

said reproducing apparatus comprising:

a reproducer for reproducing an address signal of said information track; and

means for tracking said boundary continuously on the basis of amplitude of said tracking error signal of said recordable area and said read only area in accordance with said address signal reproduced by said reproducer.